

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### D & S Manufacturing

#### Wisconsin Manufacturing Extension Partnership

#### Accelerate Slashes Late Shipments, Customer Defects for D&S Manufacturing

##### Client Profile:

D&S Manufacturing is a custom manufacturer of large-scale components, assemblies and complete weldments for corporations that include Caterpillar, Oshkosh Corporation, The Trane Company, CNH and Parkson. The company's capabilities include machining, laser, high definition plasma and oxy-fuel cutting, as well as manual and robotic welding. These resources are complemented by diverse value-added services ranging from wet painting and shot blasting to assembly and testing. The company's facility in Black River Falls, Wisconsin employs 160 people.

##### Situation:

D&S Manufacturing was confronting a variety of issues common to job shops that make small volumes of many different parts: too much work in queue, too many high-priority orders, inventory back-up and late shipments. When D&S was nominated by one of their OEMs, Oshkosh Corp., to participate in Accelerate, they immediately took advantage of the opportunity. Accelerate, an innovative supplier development initiative of the Wisconsin Manufacturing Extension Partnership (WMEP), a NIST MEP network affiliate, gives OEM's the opportunity to support key suppliers with expertise in Lean and other improvement methods.

##### Solution:

With the assistance of WMEP, D&S created a Value Stream Map (VSM) for one of their parts. The VSM pointed not only to common problems on the shop floor, but to business processes that needed revision. "We found that many of the problems related to overbooking capacity," said Mike Dougherty, D&S president. "We were taking in more work than we had the capacity to produce." An analysis revealed that some products were being sold below cost, so they were eliminated from the product line. D&S also examined how the company was releasing work orders to the floor. Those orders were creating bottlenecks and confusion about priorities. The company identified specific operations that affected the speed of operations in the entire shop. Work orders were released to match the capacity of the pacesetter operations, rather than initial operations. This change "really cleared up all the clutter," said Dougherty.

##### Results:

- \* Increased sales by \$2.3 million.
- \* Reduced Manufacturing Critical-path Time (MCT) by 30 percent.
- \* Reduced late shipments by 26 percent.
- \* Reduced customer defects by 32 percent.
- \* Reduced work in process by 50 percent.
- \* Created 15 new jobs.

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**Testimonial:**

"Supplier development is a wonderful commitment on the part of our OEM customers to help us improve our processes. WMEP's help with the VSM was key because it clearly identified where the problems were."

Mike Dougherty, President